

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-9. (Canceled).

10. (Currently Amended) ~~[[The]]~~ An ellipsometer measurement apparatus according to claim 9 for determining a thickness of a film applied on a substrate, comprising:

a light source emitting a beam;

a transmitting optical system conveying the beam to an incidence point on the substrate, the substrate reflecting the beam from the incidence point;

a photodetector device;

a receiving optical system conveying the reflected beam to the photodetector device, the receiving optical system including an analyzer, a polarization direction of the beam and of the analyzer being modified in time relative to one another;

an evaluation device evaluating intensity changes in the reflected beam and determining the film thickness as a function of the intensity changes; and

an angle measurement device sensing an angle of the reflected beam relative to a tangential plane that does not intersect the substrate in an area of the incidence point, the evaluation device determining the film thickness as a function of the sensed angle.

wherein the angle measurement device includes a photodetector unit that is position-sensitive in at least one of an X and Y direction, an angle of reflection being calculated from position data and distance data with an evaluation stage.

11. (Previously Presented) An ellipsometer measurement apparatus for determining a thickness of a film applied on a substrate, comprising:

a light source emitting a beam;

a transmitting optical system conveying the beam to an incidence point on the substrate, the substrate reflecting the beam from the incidence point;

a photodetector device;

a receiving optical system conveying the reflected beam to the photodetector device, the receiving optical system including an analyzer, a polarization direction of the beam and of the analyzer being modified in time relative to one another;

an evaluation device evaluating intensity changes in the reflected beam and determining the film thickness as a function of the intensity changes; and

an angle measurement device sensing an angle of the reflected beam relative to a tangential plane that does not intersect the substrate at the incidence point, the evaluation device determining the film thickness as a function of the sensed angle, wherein:

the angle measurement device includes a photodetector unit that is position-sensitive in at least one of an X and Y direction, an angle of reflection being calculated from position data and distance data with an evaluation stage, and

the intensity changes and the position data are sensed with a same photodetector.

12. (Currently Amended) ~~[[The]]~~ An ellipsometer measurement apparatus according to claim 10 for determining a thickness of a film applied on a substrate, comprising:

a light source emitting a beam;

a transmitting optical system conveying the beam to an incidence point on the substrate, the substrate reflecting the beam from the incidence point;

a photodetector device;

a receiving optical system conveying the reflected beam to the photodetector device, the receiving optical system including an analyzer, a polarization direction of the beam and of the analyzer being modified in time relative to one another;

an evaluation device evaluating intensity changes in the reflected beam and determining the film thickness as a function of the intensity changes; and

an angle measurement device sensing an angle of the reflected beam relative to a tangential plane that does not intersect the substrate in an area of the incidence point, the evaluation device determining the film thickness as a function of the sensed angle,

wherein the photodetector unit includes two position-sensitive photodetectors arranged at different distances ~~a distance~~ from the incidence point in a beam path of the reflected beam, the angle of reflecting being calculated based on differing positions of the reflected beam on the two position-sensitive photodetectors.

13. (Previously Presented) The measurement apparatus according to claim 12, further comprising:

a beam splitter arranged in the beam path of the reflected beam in front of the two position-sensitive photodetectors, each of the two position-sensitive photodetectors receiving a partial beam of the reflected beam.

14. (Currently Amended) The measurement apparatus according to claim ~~[[9]]~~ 11, further comprising:

a converging lens arranged in front of the photodetector device.

15. (Canceled).

16. (Currently Amended) The measurement apparatus according to claim ~~[[9]]~~ 11, wherein the transmitting optical system includes a polarizer and a $\lambda/4$ plate in a beam path of the beam, and wherein one of the polarizer and the analyzer is arranged in rotationally driven fashion about an axis normal to a surface of the one of the polarizer and the analyzer.

17. (New) The measurement apparatus according to claim 12, wherein a first one of the two position-sensitive photodetectors is arranged behind a second one of the two position-sensitive photodetectors, at least a portion of the reflected beam passing through the second position-sensitive photodetector to the first position-sensitive photodetector.